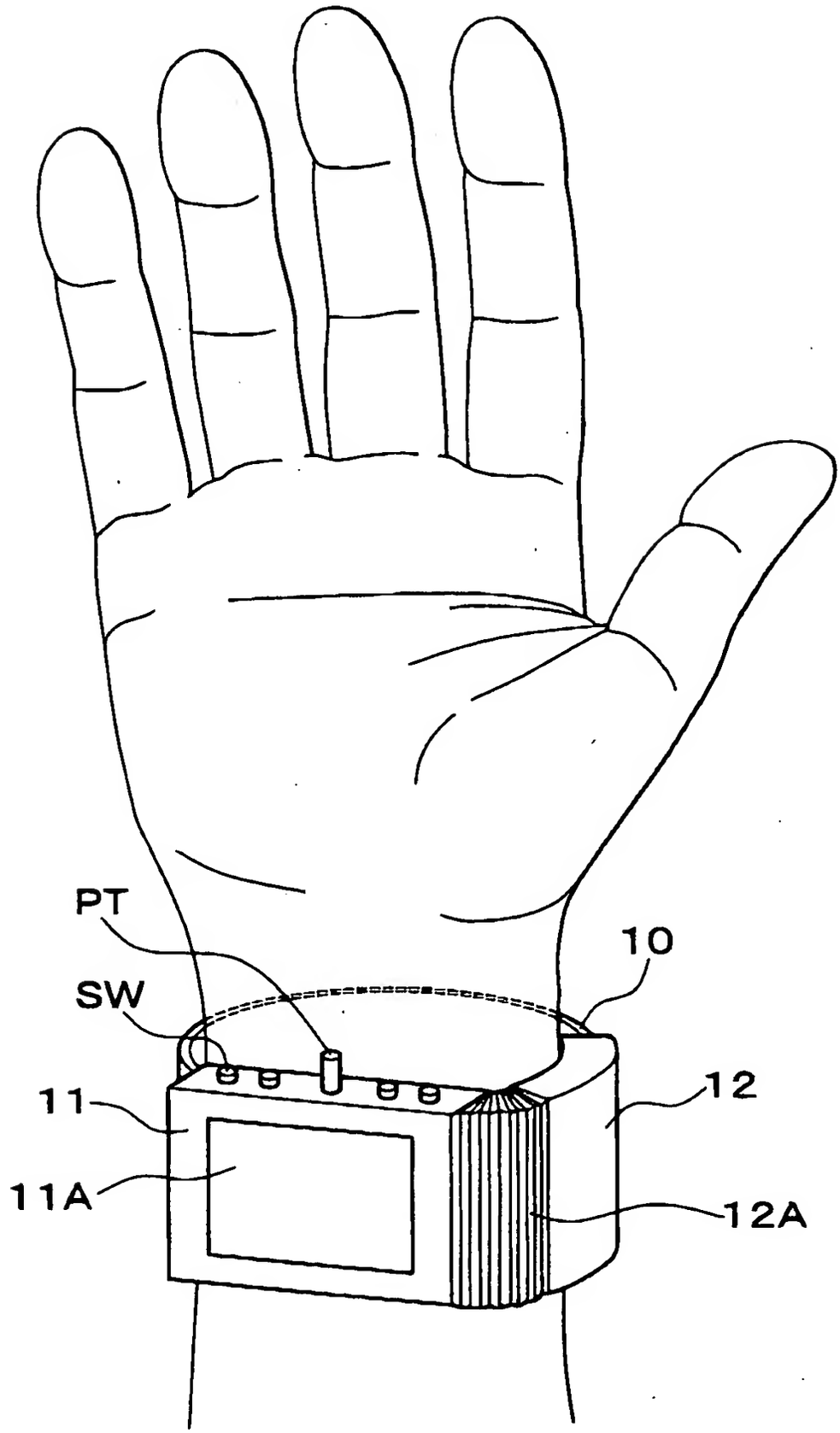
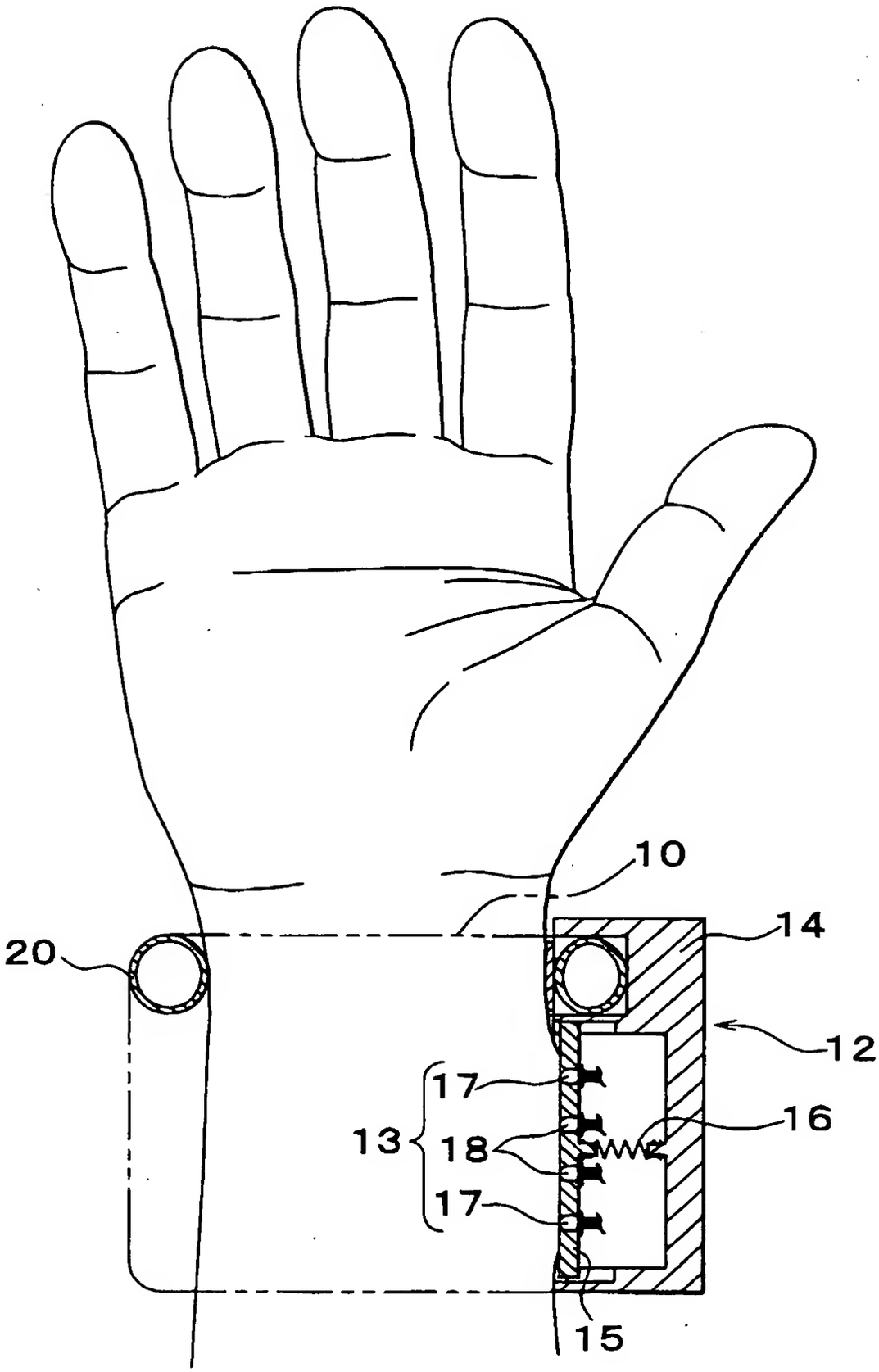
FIG. 1



1090271 - 1EH0901

FIG. 2



1000432 - 120601

FIG. 3

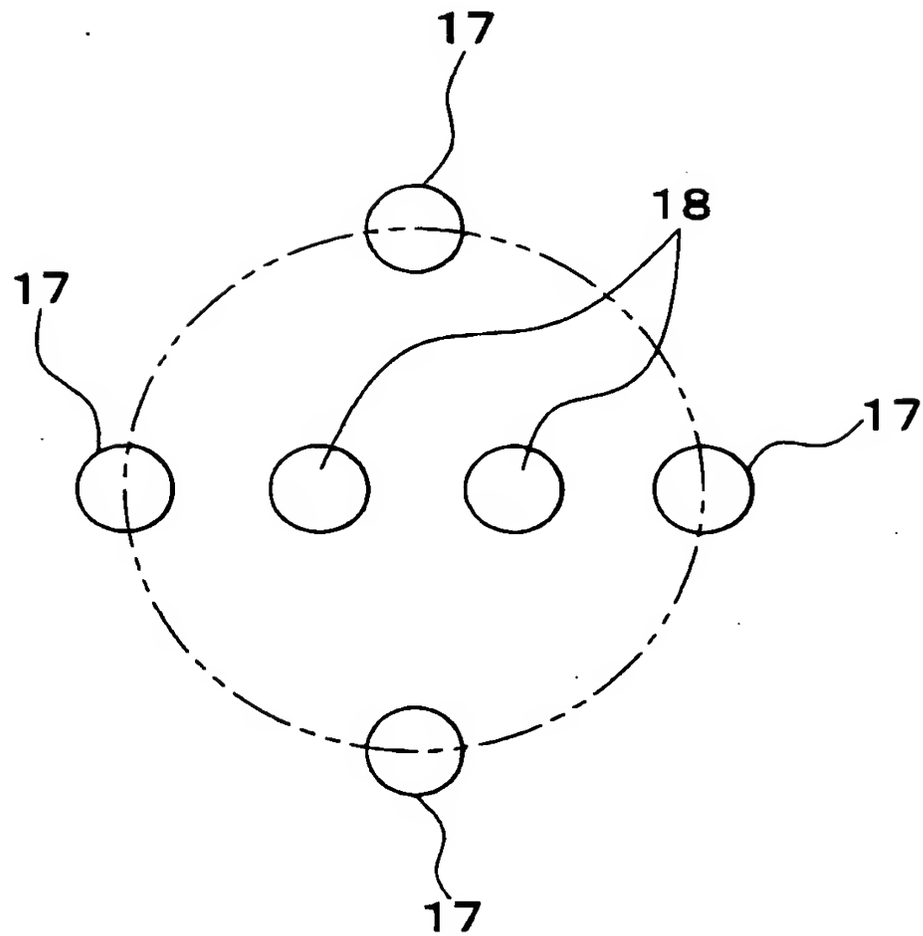


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FIG. 4

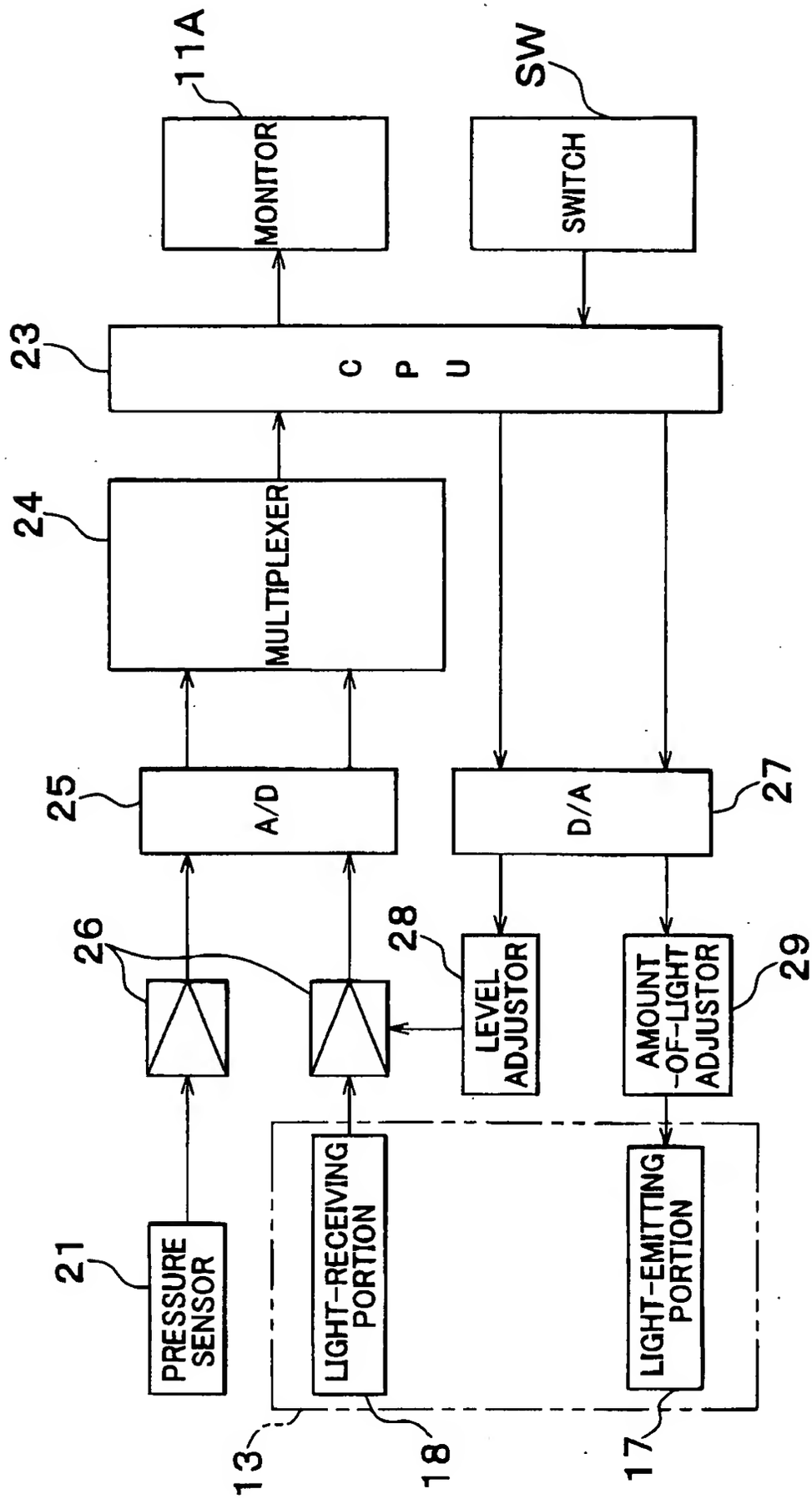
11A
MONITOR
SW
SWITCH
23
C P U
24
MULTIPLEXER
25
A/D
D/A
27
26
28
LEVEL ADJUSTOR
AMOUNT -OF-LIGHT ADJUSTOR
29
21
PRESSURE SENSOR
LIGHT-RECEIVING PORTION
LIGHT-EMITTING PORTION
13
18
17

FIG. 5A

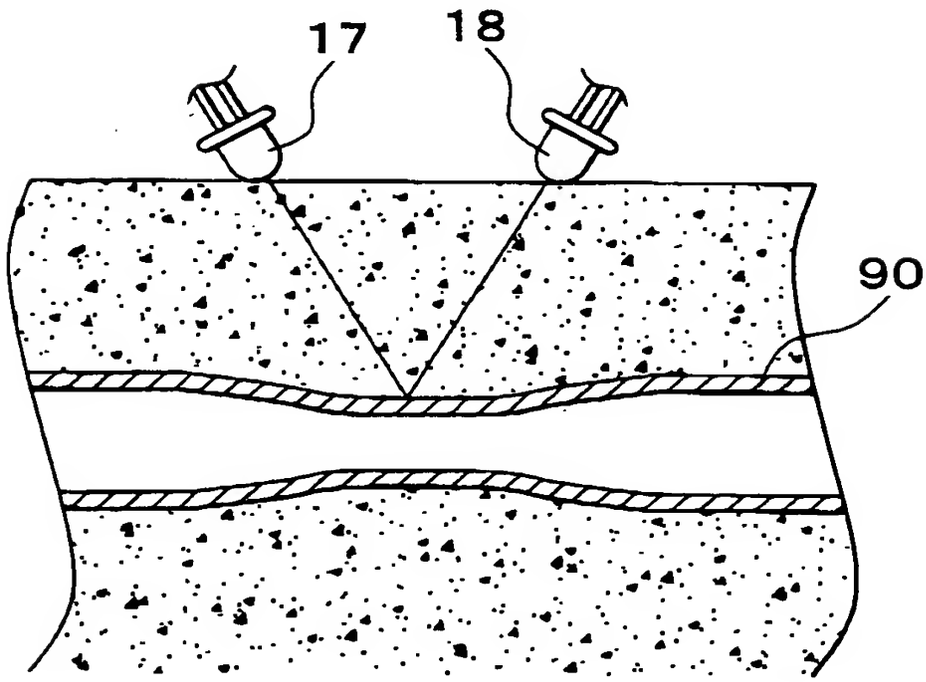

FIG. 5B

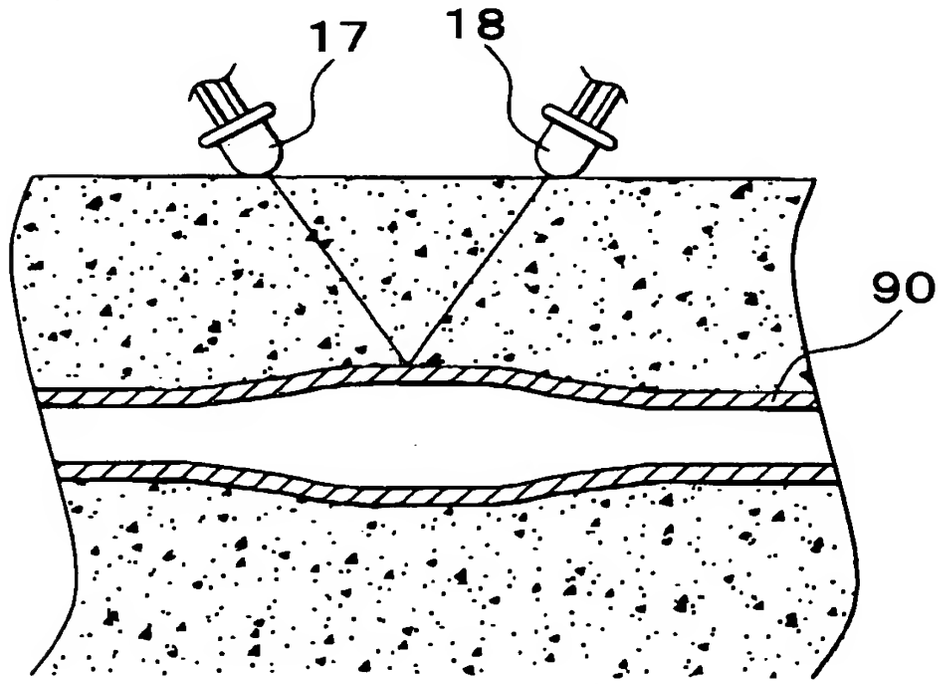

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FIG. 6

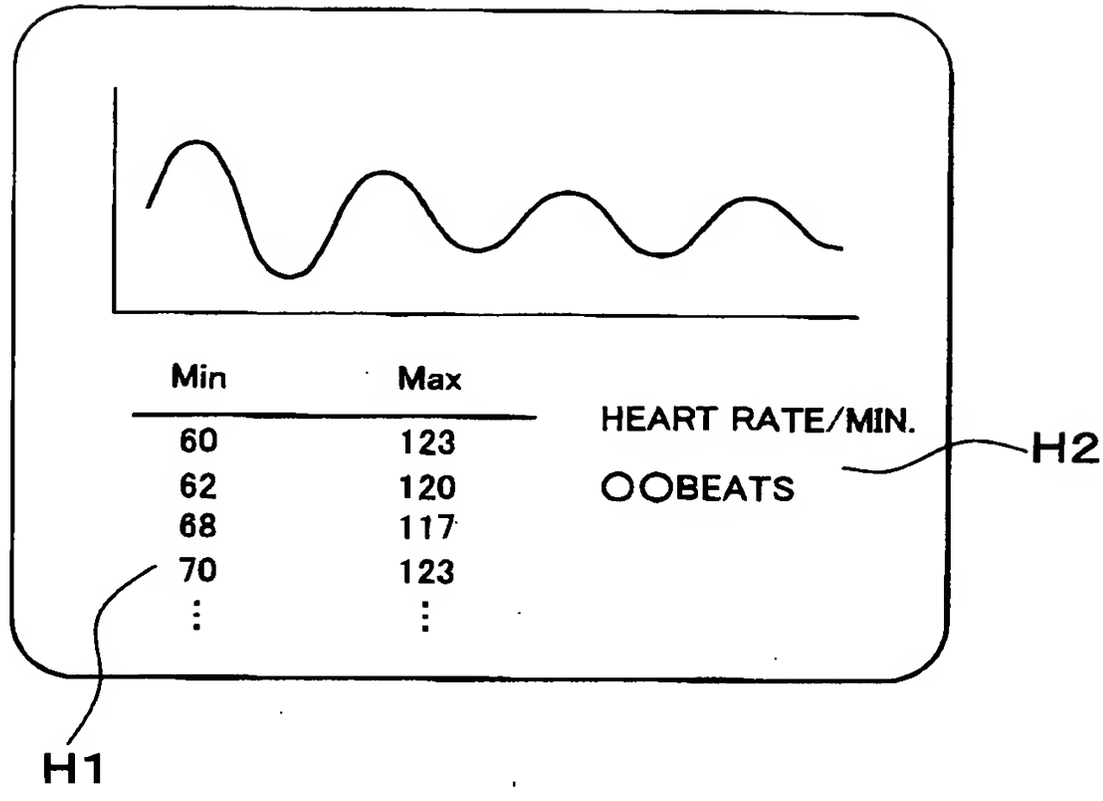

FIG. 7

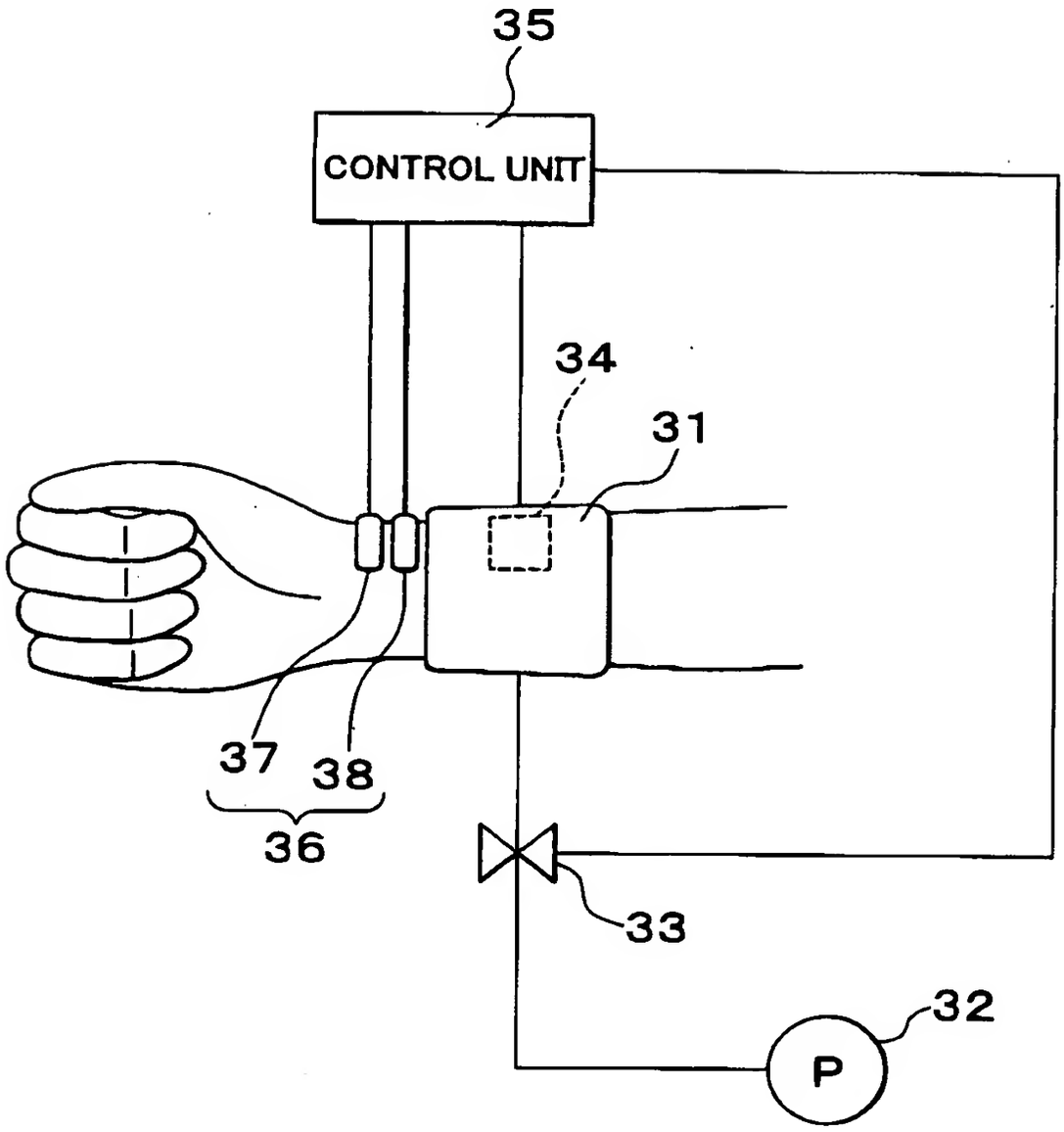

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FIG. 8

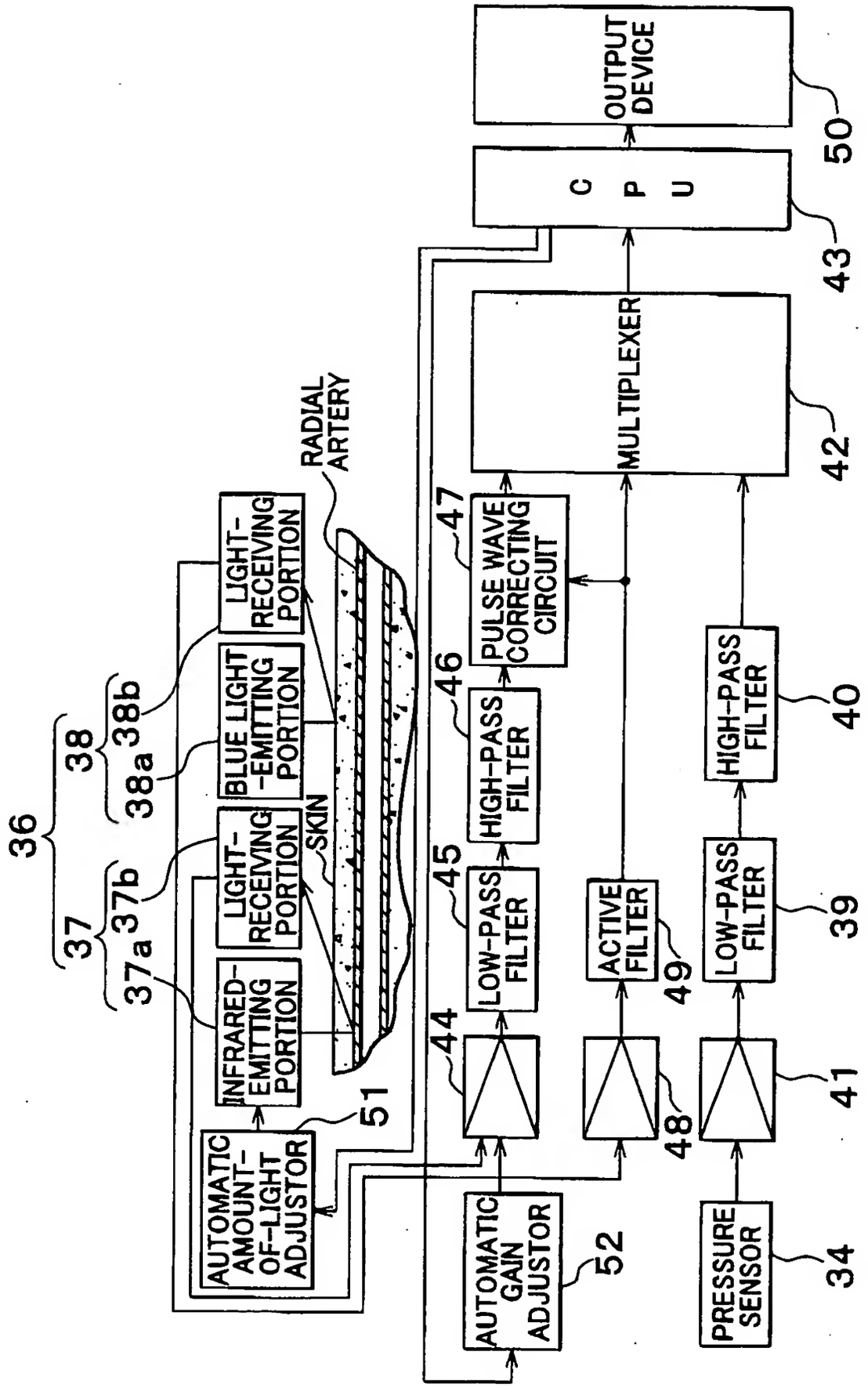
OUTPUT DEVICE
50
C P U
43
MULTIPLEXER
42
PULSE WAVE CORRECTING CIRCUIT
47
HIGH-PASS FILTER
46
LOW-PASS FILTER
45
ACTIVE FILTER
49
LOW-PASS FILTER
39
HIGH-PASS FILTER
40
RADIAL ARTERY
SKIN
LIGHT-RECEIVING PORTION
BLUE LIGHT-EMITTING PORTION
LIGHT-RECEIVING PORTION
INFRARED-EMITTING PORTION
36
38
38b
38a
37
37b
37a
AUTOMATIC AMOUNT-OF-LIGHT ADJUSTOR
51
AUTOMATIC GAIN ADJUSTOR
52
PRESSURE SENSOR
34
44
48
41

FIG. 9

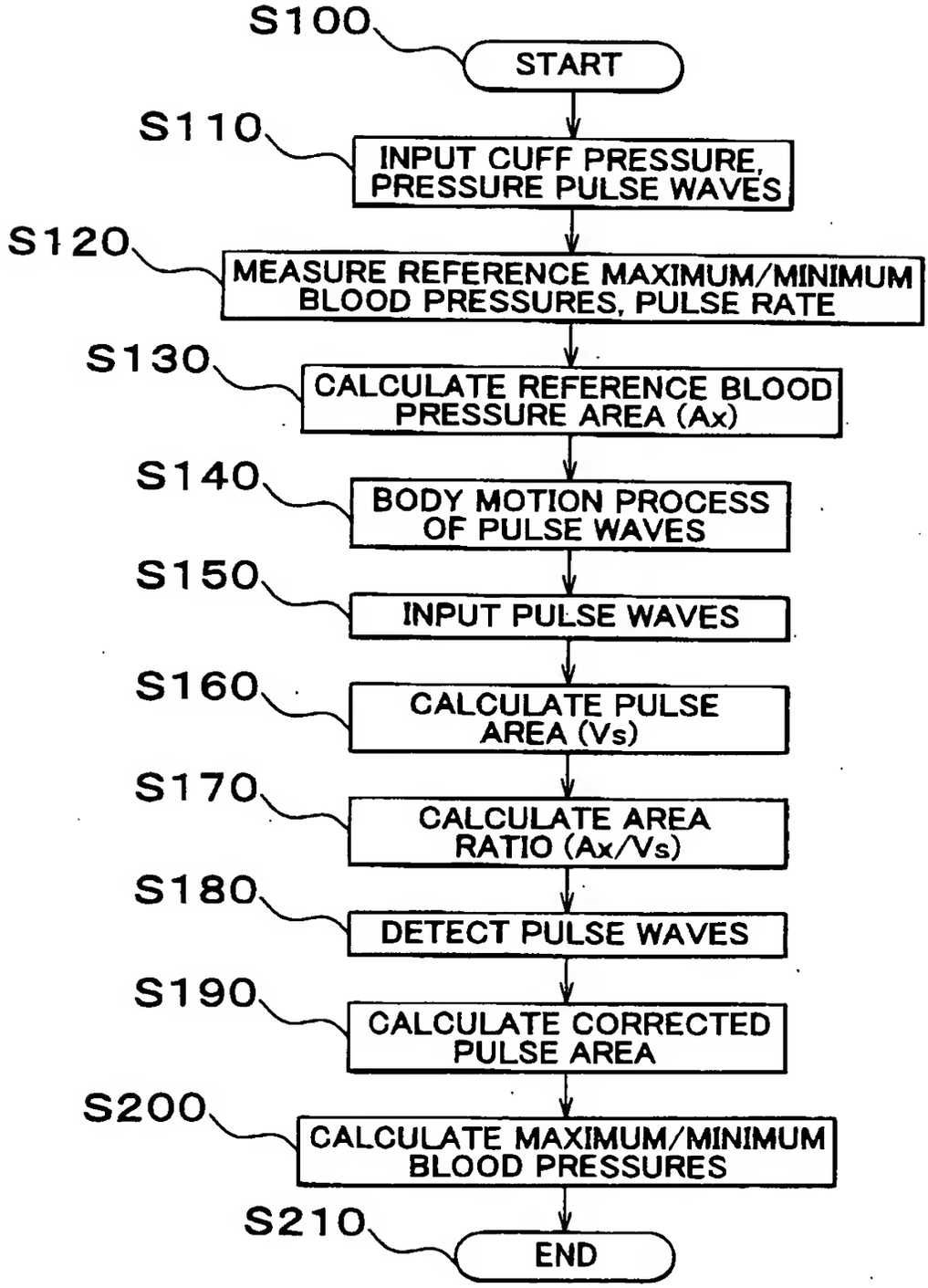

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FIG. 10

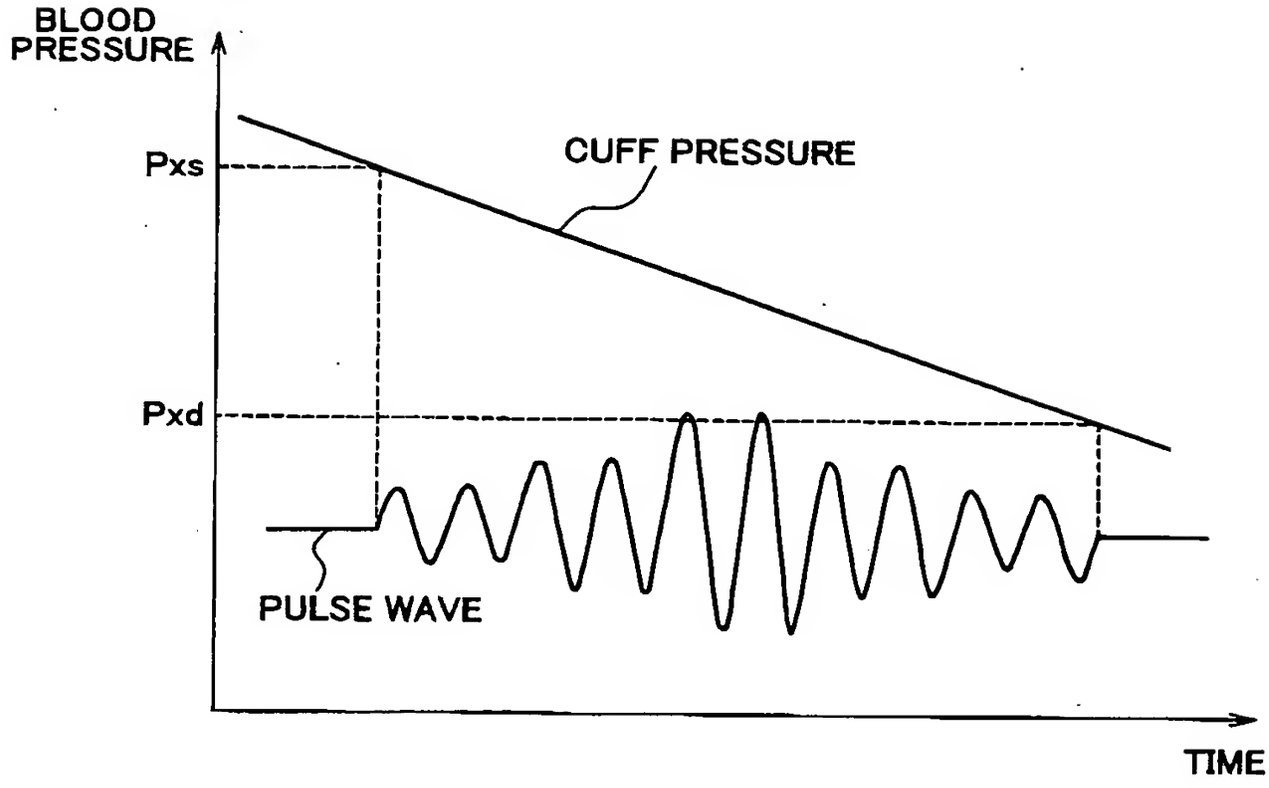


FIG. 11

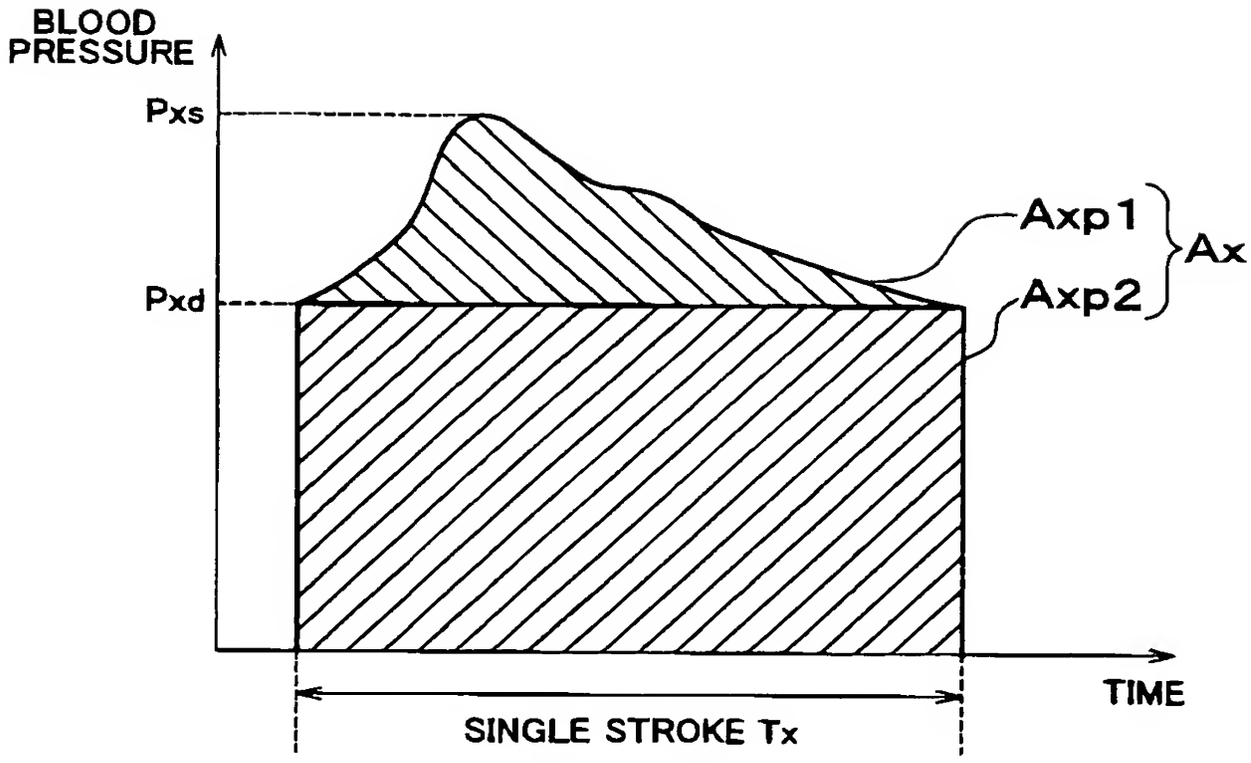


FIG. 12

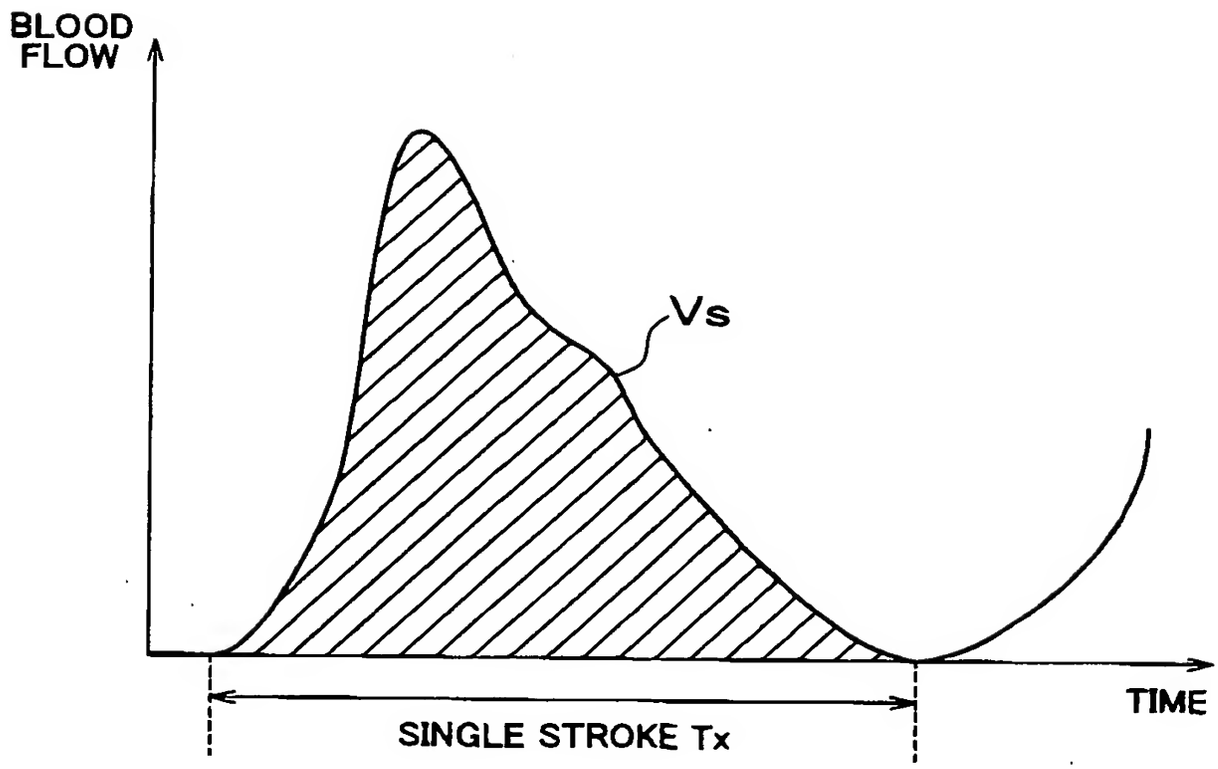


FIG. 13

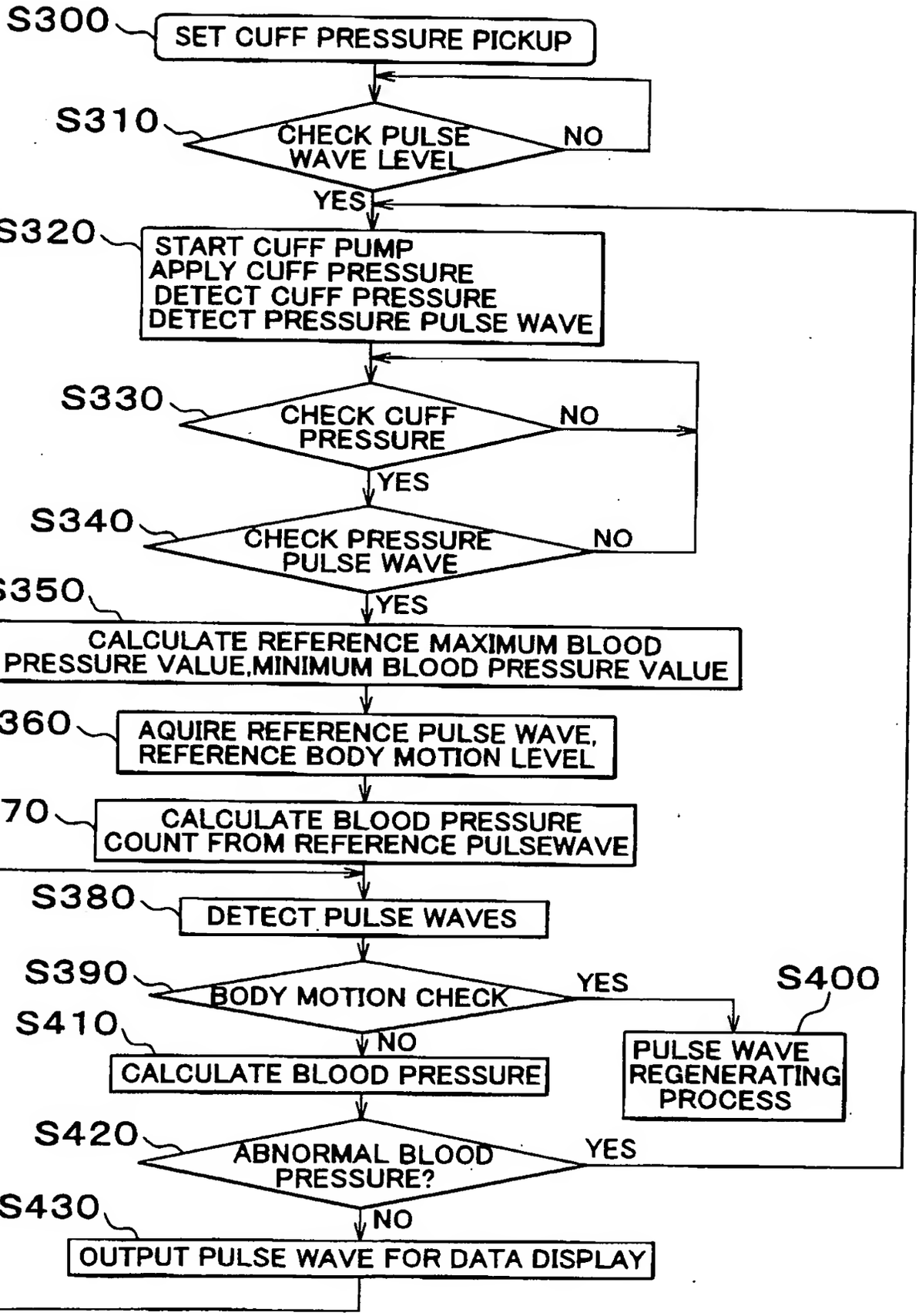

S300
SET CUFF PRESSURE PICKUP
S310
CHECK PULSE WAVE LEVEL
NO
YES
S320
START CUFF PUMP
APPLY CUFF PRESSURE
DETECT CUFF PRESSURE
DETECT PRESSURE PULSE WAVE
S330
CHECK CUFF PRESSURE
NO
YES
S340
CHECK PRESSURE PULSE WAVE
NO
YES
S350
CALCULATE REFERENCE MAXIMUM BLOOD PRESSURE VALUE,MINIMUM BLOOD PRESSURE VALUE
S360
AQUIRE REFERENCE PULSE WAVE, REFERENCE BODY MOTION LEVEL
S370
CALCULATE BLOOD PRESSURE COUNT FROM REFERENCE PULSEWAVE
S380
DETECT PULSE WAVES
S390
BODY MOTION CHECK
YES
S400
PULSE WAVE REGENERATING PROCESS
NO
S410
CALCULATE BLOOD PRESSURE
S420
ABNORMAL BLOOD PRESSURE?
YES
NO
S430
OUTPUT PULSE WAVE FOR DATA DISPLAY

FIG. 14

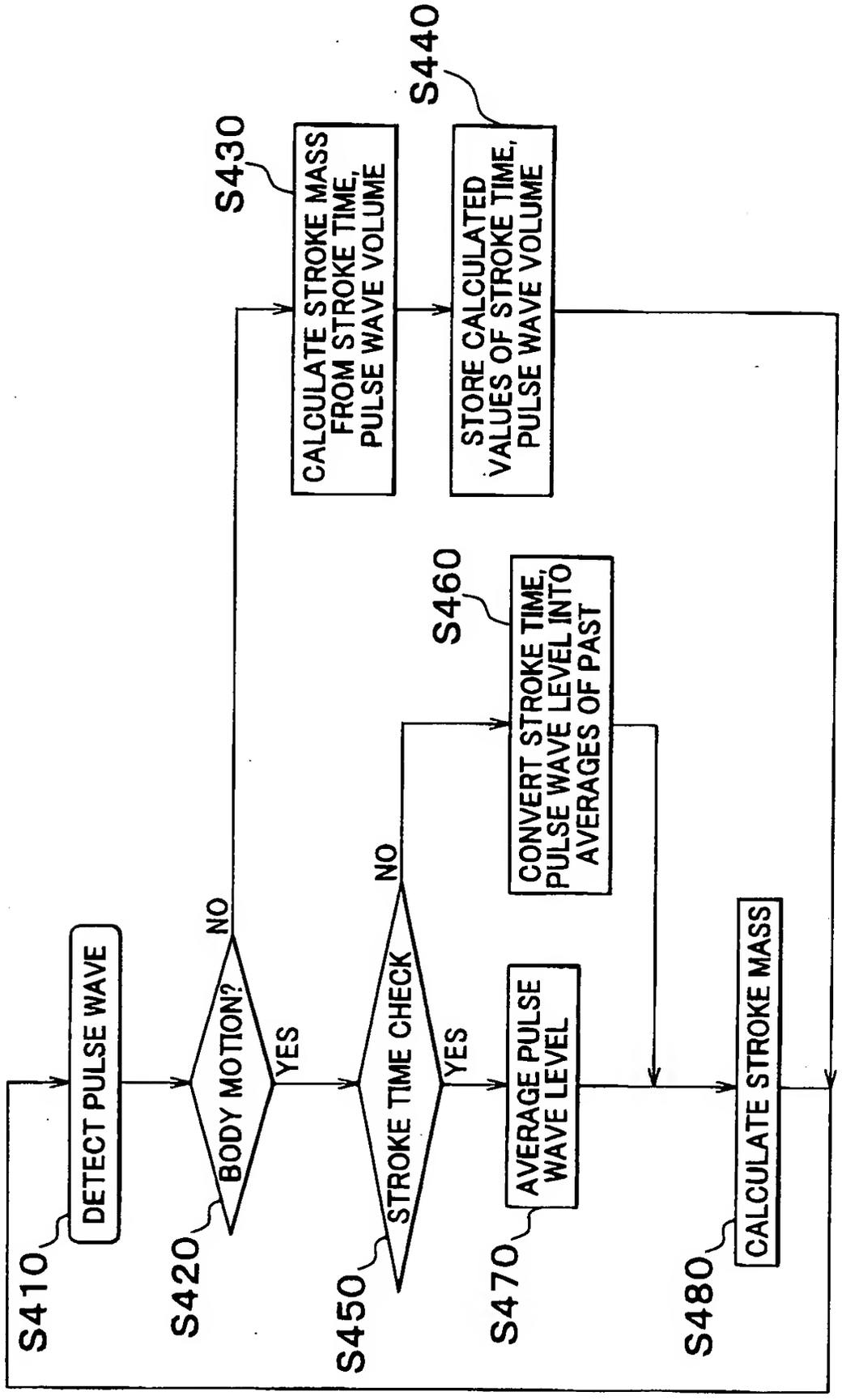
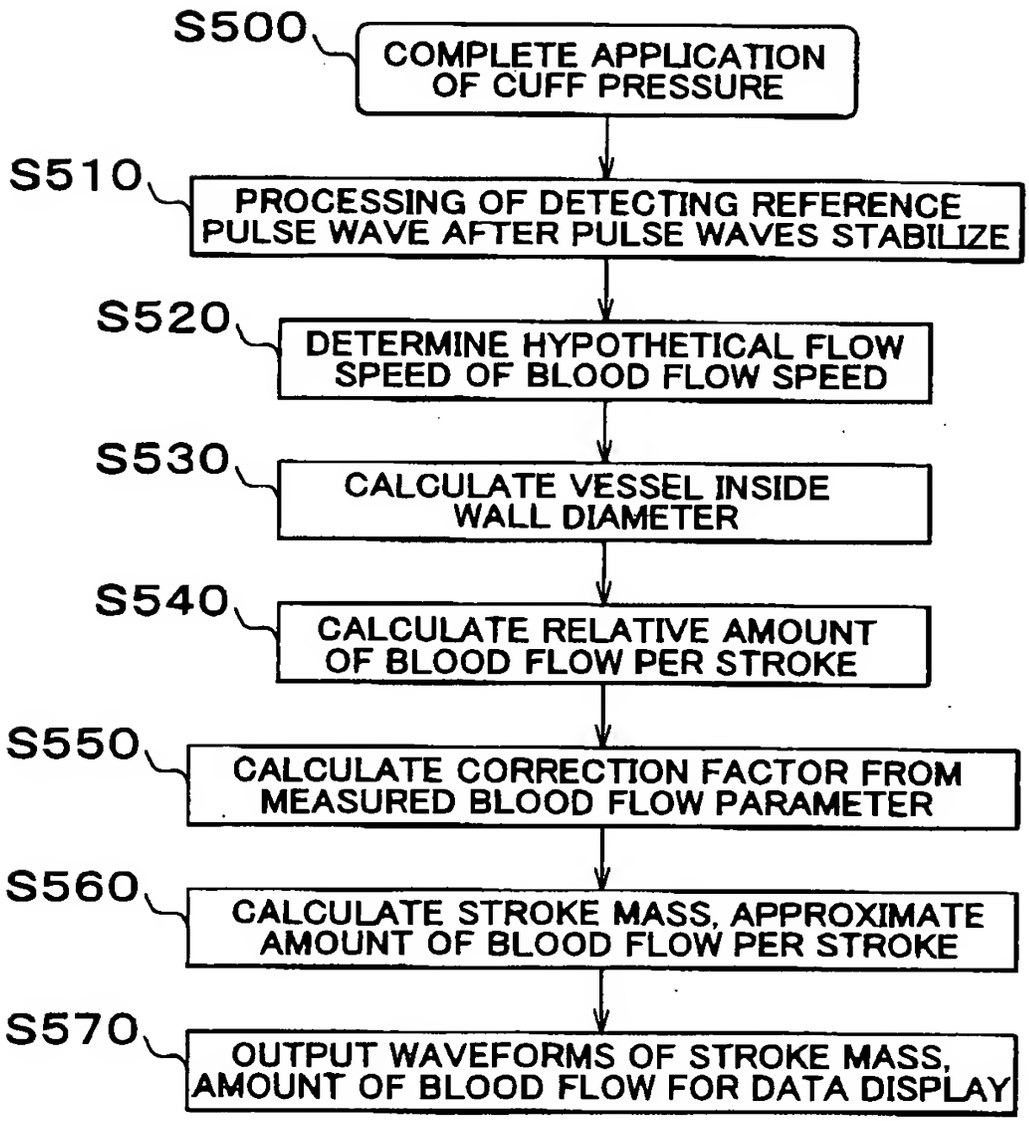

S410
DETECT PULSE WAVE
S420
BODY MOTION?
NO
YES
S430
CALCULATE STROKE MASS FROM STROKE TIME, PULSE WAVE VOLUME
S440
STORE CALCULATED VALUES OF STROKE TIME, PULSE WAVE VOLUME
S450
STROKE TIME CHECK
NO
YES
S460
CONVERT STROKE TIME, PULSE WAVE LEVEL INTO AVERAGES OF PAST
S470
AVERAGE PULSE WAVE LEVEL
S480
CALCULATE STROKE MASS

FIG. 15



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